

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003322**Date Inspected:** 26-Jul-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Xi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

: Caltrans Quality Assurance (QA) Inspector, Larry Viars was present observe fabrication and perform Ultrasonic Testing (UT) of Orthotropic Box Girder (OBG) and Tower components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

The Caltrans QA Inspector observed ZPMC welder Xu Xian Ping performing Flux Cored Arc Welding (FCAW) in the 3G position on U-rib diaphragm weld DP588-001-056. The following parameters were recorded from DP588-001-056, amperage 215, volts 25.8, travel speed of 120 mm/min with a heat input of 2.77 kJ/mm. The above mentioned welding appeared to be in conformance with the posted welding procedure specification, WPS-B-T-2133.

The Caltrans QA performed Ultrasonic Testing (UT) Verification of OBG U-rib Diaphragm CJP welds DP598-001 welds 185 through 188 and DP603-001 welds 189, 190, 195, 196, 197 and 200. The above mentioned testing was tested and accepted by ZPMC Quality Control (QC) with the exception of DP603-001-200. The Caltrans QA Inspector observed DP603-001-200 appeared to have been tested but was not accepted or rejected by QC. The Caltrans QA performed UT and found a Class B indication 14 mm in length 18 mm from the weld edge that was not in compliance with AWS D1.5 (2002) table 6.3. ZPMC QC stated that DP603-001-200 was prepped for UT by ZPMC personnel but not tested by ZPMC and that area would be repaired prior to installation on DP603-001. Please see the attached photo of DP603-001-200 prepped for UT by ZPMC personnel.

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# WELDING INSPECTION REPORT

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## Summary of Conversations:

As identified within the contents of this report.

## Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ryan Smith, (858) 232-6799, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Viars,Larry	Quality Assurance Inspector
<b>Reviewed By:</b>	Lanz,Joe	QA Reviewer

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